

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	45	chang\$7 same public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:34
L2	0	(detect\$4 notic\$4 notif\$) near15 chang\$7 near10 public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:33
L3	44	(message\$1 packet\$1) near15 public adj address same (client\$1 user\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:46
L5	19	(stor\$4 log\$4) near15 public adj address same (client\$1 user\$1 terminal\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:35
L6	23	(message packet) near15 public adj address same (sender\$1 client\$ user\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:37
L7	85	(709/227.ccls. 709/238.ccls. 709/245.ccls. 370/392.ccls.) and public adj address\$1	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:37
L8	131	(1 3 6 7) and (private vpn lan)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/27 11:47
S1	88	public adj address\$1 same (user\$1 client\$1) same receiv\$4	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 09:52
S2	73	(user\$1 client\$1) same stor\$4 same public adj address\$1	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:06
S4	40	(message\$1 packet\$1) near15 public adj address same (client\$1 user\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 13:42
S5	18652	private same public same network\$1	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:06
S7	80	private same public same network\$1 and public adj address\$1 same (private\$1 lan) same (terminal\$1 client\$1 user\$1)	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:28
S9	0	(detect\$4 notic\$4 notif\$) near15 chang\$7 near10 public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:29
S10	14	(detect\$4 notic\$4 notif\$) same chang\$7 same public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:37
S11	0	(inform\$4) same chang\$7 same public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:30

S12	45	chang\$7 same public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:36
S13	2	(client\$1 terminal user\$1) same (detect\$4 notic\$4 notif\$ inform\$4) near15 public adj address\$1 same network	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 10:37
S14	1	"20020035641"	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 14:01
S15	25	"6101549"	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 16:01
S16	1	"10059811"	US-PGPUB; USPAT; EPO	OR	OFF	2005/07/13 16:01

EIC Search Report

Set	Items	Description
S1	949	PUBLIC()ADDRESS?
S2	338532	CLIENT? OR SENDER? OR TRANSMITTER? OR INITIATOR?
S3	20912	VPN? OR PRIVATE()NETWORK? OR (POINT(N)POINT OR INTERNET? OR IP) (N)TUNNEL? OR PPP
S4	19809725	CHANGE? OR ALTER? OR NEW? OR REVISE? OR LATEST? OR CURRENT? OR DIFFERENT?
S5	12184	NAT OR ADDRESS()TRANSLAT?
S6	0	S1 AND S2 AND S3 AND S4 AND S5
S7	0	S1 AND S3 AND S5
S8	4	S1 AND S5
S9	0	S1 AND S3 AND S2
S10	0	S1 AND S3 AND S4
S11	1	S1 AND S3
S12	5	S8 OR S11
S13	5	RD (unique items)
S14	41	S2 AND S3 AND S4 AND PUBLIC
S15	0	S2 AND S3 AND S4 AND (UNPROTECTED OR UNENCRYPTED OR UNENCY-PHERED) (N)ADDRESS?
S16	41	S14 NOT S12
S17	37	RD (unique items)
S18	21	S17 NOT PY>2001
File	8: Ei Compendex(R) 1970-2005/Jul W3	(c) 2005 Elsevier Eng. Info. Inc.
File	35: Dissertation Abs Online 1861-2005/Jun	(c) 2005 ProQuest Info&Learning
File	65: Inside Conferences 1993-2005/Jul W3	(c) 2005 BLDSC all rts. reserv.
File	2: INSPEC 1969-2005/Jul W3	(c) 2005 Institution of Electrical Engineers
File	94: JICST-EPlus 1985-2005/Jun W1	(c) 2005 Japan Science and Tech Corp (JST)
File	111: TGG Natl. Newspaper Index(SM) 1979-2005/Jul 22	(c) 2005 The Gale Group
File	6: NTIS 1964-2005/Jul W3	(c) 2005 NTIS, Intl Cpyrght All Rights Res
File	144: Pascal 1973-2005/Jul W3	(c) 2005 INIST/CNRS
File	34: SciSearch(R) Cited Ref Sci 1990-2005/Jul W3	(c) 2005 Inst for Sci Info
File	62: SPIN(R) 1975-2005/May W2	(c) 2005 American Institute of Physics
File	99: Wilson Appl. Sci & Tech Abs 1983-2005/Jun	(c) 2005 The HW Wilson Co.
File	95: TEME-Technology & Management 1989-2005/Jun W3	(c) 2005 FIZ TECHNIK

Set	Items	Description
S1	574	PUBLIC()ADDRESS?
S2	322270	CLIENT? OR SENDER? OR TRANSMITTER? OR INITIATOR?
S3	4196	VPN OR PRIVATE()NETWORK? OR (POINT(N)POINT OR INTERNET? OR IP) (N)TUNNEL? OR PPP
S4	2623	NAT OR ADDRESS()TRANSLAT?
S5	2	S1 AND S2 AND S3 AND S4
S6	7	S1 AND S3 AND S4
S7	5	S6 NOT S5

File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)

(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200546

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5/5/1 (Item 1 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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015747768 **Image available**

WPI Acc No: 2003-809969/200376

Apparatus and method for controlling device of private network in public network

Patent Assignee: ELECTRONICS & TELECOM RES INST (ELTE-N); KOREA ELECTRONICS & TELECOM RES INST (KOEL-N)

Inventor: CHO C R; KIM J M; PARK G R

Number of Countries: 001 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
KR 2003055766	A	20030704	KR 200185844	A	20011227	200376 B
KR 429902	B	20040503	KR 200185844	A	20011227	200458

Priority Applications (No Type Date): KR 200185844 A 20011227

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
KR 2003055766	A	1	H04L-012/12	
KR 429902	B		H04L-012/12	Previous Publ. patent KR 2003055766

Abstract (Basic): KR 2003055766 A

NOVELTY - An apparatus and a method for controlling a device of a **private network** in a public network are provided to offer a data structure of a message used for a communication protocol between a **client** of the public network and a directory server controlling the device of the **private network**, when the **client** controls the device.

DETAILED DESCRIPTION - A control point system(21) comprises a UPnP(Universal Plug and Play) control point function module(210), a URL(Uniform Resource Locator) information change module(220) and an NAT (Network Address Translation) registration management module(230). The UPnP control point function module(210) provides a multicast discovery function, and a description request and receiving function. The URL information change module(220) extracts URL information from a description document in a UPnP devices(100) of a **private network** device received by the UPnP control point function module(210) and allocates a **public address** corresponding to a private address, to produce a changed description document having information on the URL changed to the **public address**. And the NAT registration management module(230) stores and manages matching relation between the private address and the **public address** in an NAT table. A proxy server system(24) comprises a unicast discovery/advertisement processing module(240) and a changed description request management module(250). The unicast discovery/awareness processing module(240) receives a discovery message delivered from a public network **client** (300) to respond to the URL information of the device description, and delivers a unicast advertising message to the public network **client** (300) if new device description information is generated in the **private network**. And the changed description request management module(250) delivers the changed description document generated in the control point system(21), if a description request is delivered from the public **client** (300).

pp; 1 DwgNo 1/10

Title Terms: APPARATUS; METHOD; CONTROL; DEVICE; PRIVATE; NETWORK; PUBLIC; NETWORK

Derwent Class: W01

International Patent Class (Main): H04L-012/12

File Segment: EPI

5/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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015030401 **Image available**
WPI Acc No: 2003-090918/200308
XRPX Acc No: N03-071865

**Internet protocol based service supporting method for cell phone,
involves assigning dynamic public address corresponding to internet
protocol address to push client**

Patent Assignee: MOTOROLA INC (MOTI)
Inventor: DORENBOSCH J P; HANSCHKE B A; VIOLA C J
Number of Countries: 100 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020138622	A1	20020926	US 2001813706	A	20010321	200308 B
WO 200277842	A1	20021003	WO 2002US6545	A	20020305	200308
AU 2002248530	A1	20021008	AU 2002248530	A	20020305	200432

Priority Applications (No Type Date): US 2001813706 A 20010321

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 20020138622	A1		9 G06F-015/16	
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WO 200277842	A1 E		G06F-015/16	
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Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG UZ VN YU ZA
ZM ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

AU 2002248530	A1		G06F-015/16	Based on patent WO 200277842
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Abstract (Basic): US 20020138622 A1

NOVELTY - A server (111) has a database with cross-references
between a user name and a long lived IP address which is assigned to a
cell phone (117). A push session is initiated between a push client
and the cell phone, by forwarding the user name, and a dynamic public
address corresponding to the long lived IP address, is assigned using
an application level gateway associated with a network address
translator (NAT), and is returned to the push client .

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for
private network .

USE - For mobile devices such as cell phone through private
network (claimed) such as a radio access network.

ADVANTAGE - Provides efficient push services to mobile devices, by
assigning the dynamic public address to the push client using
application level gateway.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
cellular communication system.

Server (111).

IP address (113)

User name (115)

Cell phone (117)

pp; 9 DwgNo 1/3

Title Terms: PROTOCOL; BASED; SERVICE; SUPPORT; METHOD; CELL; TELEPHONE;
ASSIGN; DYNAMIC; PUBLIC; ADDRESS; CORRESPOND; PROTOCOL; ADDRESS; PUSH;
CLIENT

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/16

File Segment: EPI

7/5/2 (Item 2 from file: 350)
DIALOG(R) File 350:Derwent WPIX
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016443883 **Image available**
WPI Acc No: 2004-601799/200458
XRPX Acc No: N04-475794

Communication messages exchanging method for Internet protocol communication network, involves performing address translation on messages to use private and public address for telephone number based device in respective networks

Patent Assignee: NORTEL NETWORKS LTD (NELE)

Inventor: EDHOLM P K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6772210	B1	20040803	US 2000609964	A	20000705	200458 B

Priority Applications (No Type Date): US 2000609964 A 20000705

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6772210	B1	20	G06F-015/173	

Abstract (Basic): US 6772210 B1

NOVELTY - The method involves allocating a **public** address for telephone number based device e.g. voice-over-Internet protocol (VoIP) device, in a public network. An **address translation** on communication messages is performed, such that private address for the device is used in a **private network** and the **public address** or **public address** /port number pair for the device is used in the public network.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(A) an apparatus for enabling communication in an IP communication system

(B) a computer program for use in a computer system for enabling communication in an IP communication system

(C) a method of supporting telephone number based services in an IP communication system

(D) a communication system.

USE - Used for exchanging communication messages between a number of telephone number based devices e.g. voice-over-internet protocol (IP) device, facsimile over-IP device, and paging device, in an Internet protocol communication network for telephone number based communication service e.g. telephone (voice), facsimile, and paging services.

ADVANTAGE - The method translates the address on the communication message to enable the VoIP device to communicate across the two communication networks e.g. public and **private networks**, that requires the public and private addresses, thus effectively exchanging communication messages between the telephone number based devices in an IP communication network.

DESCRIPTION OF DRAWING(S) - The drawing shows a logical flow diagram depicting exemplary logic for establishing a VoIP connection by the gateway when the VoIP connection is initiated by the private VoIP device.

pp; 20 DwgNo 4/9

Title Terms: COMMUNICATE; MESSAGE; EXCHANGE; METHOD; PROTOCOL; COMMUNICATE; NETWORK; PERFORMANCE; ADDRESS; TRANSLATION; MESSAGE; PRIVATE; PUBLIC; ADDRESS; TELEPHONE; NUMBER; BASED; DEVICE; RESPECTIVE; NETWORK

Derwent Class: T01; W01

International Patent Class (Main): G06F-015/173

File Segment: EPI

7/5/4 (Item 4 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014814934 **Image available**
WPI Acc No: 2002-635640/200268
XRPX Acc No: N02-502166

Global Internet Protocol telephony system support method involves replacing private address with public address to regenerate signaling message, and releasing public address when call is terminated
Patent Assignee: LG ELECTRONICS INC (GLDS)
Inventor: CHOI G M; CHOI J H; KANG H J; LEE H S; CHOI G; CHOI J; KANG H; LEE H

Number of Countries: 002 Number of Patents: 003
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020085561	A1	20020704	US 2001970712	A	20011005	200268 B
KR 2002057079	A	20020711	KR 200087330	A	20001230	200305
KR 360274	B	20021109	KR 200087330	A	20001230	200330

Priority Applications (No Type Date): KR 200087330 A 20001230

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020085561	A1		19	H04L-012/56	
KR 2002057079	A			H04L-012/28	
KR 360274	B			H04L-012/28	Previous Publ. patent KR 2002057079

Abstract (Basic): US 20020085561 A1

NOVELTY - A private address is transmitted to a network **address translation** (NAT) router using a special channel according to an identified dynamic NAT mode. A **public address** replaces the private address to regenerate a signaling message which is transmitted to a public Internet Protocol (IP) terminal. The **public address** assigned from the NAT router is released, when a call is terminated.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Network telephony method; and
- (2) Network telephony system.

USE - For supporting global Internet Protocol telephony system.

ADVANTAGE - Provides a transparent network **address translation** (NAT) of a protocol message exchanged among a caller, a gate keeper and a called person so that an IP telephony service is available between an external network and a **private network** operated by the NAT .

DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of an interworking method between the gate keeper and the NAT router.

pp; 19 DwgNo 7/9

Title Terms: GLOBE; PROTOCOL; TELEPHONE; SYSTEM; SUPPORT; METHOD; REPLACE; PRIVATE; ADDRESS; PUBLIC; ADDRESS; REGENERATE; MESSAGE; RELEASE; PUBLIC; ADDRESS; CALL; TERMINATE

Derwent Class: T01; W01

International Patent Class (Main): H04L-012/28; H04L-012/56

File Segment: EPI

7/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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014650770 **Image available**
WPI Acc No: 2002-471474/200250
XRPX Acc No: N02-372187

**Computer system operating method for shared network applications,
involves receiving reply containing address of private network for
sending to host, in response to received request**

Patent Assignee: SPRINT COMMUNICATIONS CO LP (SPRI-N)

Inventor: MCPHERSON J

Number of Countries: 096 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200235801	A2	20020502	WO 2001US45266	A	20011024	200250 B
AU 200232454	A	20020506	AU 200232454	A	20011024	200257

Priority Applications (No Type Date): US 2000695109 A 20001024

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

WO 200235801 A2 E 21 H04L-029/12

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA
CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR
IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

AU 200232454 A H04L-029/12 Based on patent WO 200235801

Abstract (Basic): WO 200235801 A2

NOVELTY - A domain name service query from a requesting host (139) received for the **public address of private network** host (197), is transmitted to a network **address translator** (100). A reply containing the address of the network host is received and sent to the requesting host.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for computer-readable medium storing shared computer system operation program.

USE - For operating computer system in a shared network application using a network **address translator**.

ADVANTAGE - Allows set of **public addresses** to be shared with a public network address being dynamically allocated to a **private network** host in response to a request for access by a host external to the **private network**.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of a shared network environment.

Network **address translator** (100)

Hosts (139,197)

pp; 21 DwgNo 1/4

Title Terms: COMPUTER; SYSTEM; OPERATE; METHOD; SHARE; NETWORK; APPLY;
RECEIVE; REPLY; CONTAIN; ADDRESS; PRIVATE; NETWORK; SEND; HOST; RESPOND;
RECEIVE; REQUEST

Derwent Class: T01

International Patent Class (Main): H04L-029/12

File Segment: EPI

13/5/4 (Item 2 from file: 94)
DIALOG(R)File 94:JICST-EPlus
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04484971 JICST ACCESSION NUMBER: 00A0155379 FILE SEGMENT: JICST-E
Routing Control for a network including public address and private address networks.

YOSHIURA NORIAKI (1); SAKURAI SEIICHIRO (1); SAKAMOTO NAOSHI (1); FUJIMOTO KO (1)

(1) Tokyo Inst. of Technol.

Joho Shori Gakkai Kenkyu Hokoku, 1999, VOL.99,NO.77(DSM-15), PAGE.1-6,
FIG.3, TBL.1, REF.7

JOURNAL NUMBER: Z0031BAO ISSN NO: 0919-6072

UNIVERSAL DECIMAL CLASSIFICATION: 621.394/.395 681.3:654 681.3.02.002

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

ABSTRACT: **Private network** address is a temporary solution for exhaustion of the 32-bit IP address space. From the view of network security, **private network** addresses have been also used in many sites. This paper presents one example of administrating campus network in which **public address** networks and private address networks coexist. One of the problems in such an administration is control of routing and it is necessary for solving this problem that all routers for private address network deal with variable length subnet mask(VLSM) and routing protocol handling VLSM. (author abst.)

DESCRIPTORS: computer network; network management; trunk(communication network); FDDI; university; internet; protocol; topology; routing; addressing

IDENTIFIERS: path control

BROADER DESCRIPTORS: communication network; information network; network; communication administration; management; system interface; interface; school; rule; mathematics; selection; communication operation; operation(processing); address system; method

CLASSIFICATION CODE(S): ND11010T; JC03000K; JD02020C

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